



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,786	02/05/2004	Raymond L. Sharrah	P03087US1 (243-Streamligh	5199
110	7590	12/28/2005	EXAMINER ALEMU, EPHREM	
DANN, DORFMAN, HERRELL & SKILLMAN 1601 MARKET STREET SUITE 2400 PHILADELPHIA, PA 19103-2307			ART UNIT 2821	PAPER NUMBER

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

HFD

Office Action Summary	Application No.	Applicant(s)	
	10/772,786	SHARRAH ET AL.	
	Examiner	Art Unit	
	Ephrem Alemu	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7,8,11,18 and 21 is/are allowed.
- 6) ☒ Claim(s) 1-6,9,10,12-17,19,20 and 22-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 22-33 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Re claims 22, 28, 29, 33 and 35, line 2, respectively, the phrase "may be" renders the claim indefinite because it is unclear whether the battery potential is applied across the first and second terminal. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 2, 4, 9, 10, 12, 13, 14, 19, 20, 28, 32 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. (US 6,841,941).

Re claims 1, 2, 4, 9, 12, 13, 14 and 19, Kim discloses in a battery operated light (i.e., hand held flash light) comprising a first light source (i.e., incandescent lamp 18), a battery (22) and a first switch (i.e., second on position in which switch assembly 26 with switch contacts 34

Art Unit: 2821

in contact with contact 38) in circuit for selectively energizing the first light source (i.e., incandescent lamp 18) to produce light (i.e. light output approximately sixty lumens) (Figs. 1, 2, 15; Col. 2, lines 2-8; Col. 4, line 53- Col. 5, line 48; Col. 7, line 23- Col. 8, line 20);

a source of a reference potential (i.e., TTL threshold input via resistor 95 and/or stable power source by diode 96, series resistor 97 and capacitor 98; wherein the source of reference potential comprises a diode and/or a Zener diode and/or a resistive voltage divider) (Figs. 1, 2, 15; Col. 8, lines 28-46);

a comparator (i.e., microprocessor 90 which is included in controller 30) responsive to a potential produced by the battery and to the reference potential for de-energizing the first light source when the battery potential is below a predetermined potential (Figs. 1, 2, 15; Col. 1, lines 44-49; Col. 3, lines 17-34; Col. 8, line 21- Col. 9, line 9; especially see Col. 8, starting line 63);

a second light source (i.e., LEDs 20) that operates at a lower current than does the first light source to produce light (i.e. light output approximately five lumens) (Figs. 1, 2, 15; Col. 1, line 63- Col. 2, line 2; Col. 4, line 53- Col. 5, line 48; Col. 8, lines 8-20); and

a second switch (i.e., second on position in which switch assembly 26 with switch contacts 32 in contact with contact 36) in circuit with the battery for selectively energizing the second light source to produce light (Figs. 1, 2, 15; Col. 1, line 63- Col. 2, line 2; Col. 4, line 53- Col. 5, line 48; Col. 8, lines 8-45; Col. 9, lines 1-23; wherein the second switch (i.e., second on position in which switch assembly 26 with switch contacts 32 in contact with contact 36) is operable independently of the first switch and/or is operable responsive to the comparator (i.e., microprocessor 90 which is included in controller 30) de-energizing the first light source when the battery potential is below the predetermined potential).

Art Unit: 2821

Re claims 10 and 20, Kim further discloses means for energizing (i.e., controller 30) the second light source responsive to the comparator (i.e., microprocessor 90 which is included in controller 30) de-energizing the first light source (i.e., incandescent lamp 18) when the battery potential is below the predetermined potential (Figs. 1, 2, 15; Col. 1, line 63- Col. 2, line 2; Col. 4, line 53- Col. 5, line 48; Col. 8, lines 8-45; Col. 9, lines 1-23).

Re claims 28 and 32, Kim discloses a power control for battery operated apparatus comprising:

first and second terminals across which a battery potential (22) may be applied;

a first switch (26) having first and second ends, the first end thereof being coupled to the first terminal (i.e., negative terminal of battery 22) (Fig. 15);

a first transistor (94) having a controllable conduction path between first and second electrodes and having a control electrode (i.e., electrode that is connected to pin 5 of microprocessor 90) for controlling the conduction of the controllable conduction path thereof, the first electrode thereof being coupled to the second terminal (i.e., via switch 26); and

a source of a reference potential (i.e., TTL threshold input via resistor 95 and/or stable power source by diode 96, series resistor 97 and capacitor 98; wherein the source of reference potential comprises a diode and/or a Zener diode and/or a resistive voltage divider) (Figs. 1, 2, 15; Col. 8, lines 28-46);

wherein the second electrode of the first transistor is coupled to the first terminal via a load (18) (Fig. 15)..

Re claim 34, Kim discloses in a battery operated light (i.e., hand held flash light) comprising a first light source (i.e., incandescent lamp 18), a battery (22) and a first switch (i.e.,

Art Unit: 2821

second on position in which switch assembly 26 with switch contacts 34 in contact with contact 38) in circuit for selectively energizing the first light source (i.e., incandescent lamp 18) to produce light (i.e. light output approximately sixty lumens) (Figs. 1, 2, 15; Col. 2, lines 2-8; Col. 4, line 53- Col. 5, line 48; Col. 7, line 23- Col. 8, line 20);

a source of a reference potential (i.e., TTL threshold input via resistor 95) (Figs. 1, 2, 15; Col. 8, lines 28-46);

a comparator (i.e., microprocessor 90 which is included in controller 30) responsive to a potential for de-energizing the first light source when the battery potential is below a predetermined potential (Figs. 1, 2, 15; Col. 1, lines 44-49; Col. 3, lines 17-34; Col. 8, line 21- Col. 9, line 9; especially see Col. 8, starting line 63);

a second light source (i.e., LEDs 20) that operates to produce light (i.e. light output approximately five lumens) at a lower current than does the first light source (i.e., incandescent lamp 18), wherein the second light source is operable from the battery to produce light at least after the comparator de-energizing the first light source (i.e., incandescent lamp 18) (Figs. 1, 2, 15; Col. 1, line 63- Col. 2, line 2; Col. 4, line 53- Col. 5, line 48; Col. 8, lines 8-20).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 5, 6, 15, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 6,841,941).

Re claim 3, 5, 6, 15, 16 and 17, although, Kim does not disclose the second switch or comparator comprises a transistor having a controllable conduction path in circuit with the battery and the second light source and having a control terminal coupled to the comparator for controlling the second light source responsive to the comparator de-energizing the first light source when the battery potential is below the predetermined potential, Kim discloses a controller 30 including a microprocessor 90 including a transistor 94 for the purpose of controlling the de-energizing of the first light source and the energizing of the second light source when the battery potential is below the predetermined potential (i.e., incandescent lamp 18) (Figs. 1, 2, 15; Col. 1, line 63- Col. 2, line 2; Col. 4, line 53- Col. 5, line 48; Col. 8, lines 8-20).

Therefore, it would have been well in the skill of an artisan at the time the invention was made to modify the circuit of Kim's by providing the transistor having a controllable conduction path in circuit with the battery and the second light source and having a control terminal coupled to the comparator, since Kim discloses of using a transistor for the purpose of controlling the de-energizing of the first light source when the battery potential is below the predetermined potential.

Allowable Subject Matter

8. Claims 7, 8, 11, 18 and 21 are allowed.
9. Claims 22-27, 29-31, 33 and 35 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
10. The reason for indication of allowable subject matter has been previously indicated in the previous office action mailed on 6-30-05.

Art Unit: 2821

Response to Arguments

11. Applicant's arguments filed 9-26-05 have been fully considered but they are not persuasive. In response to applicant argument that the application of Kim et al. (US 6,841,941) over the rejected claimed applicant invention is in error is respectfully disagreed. The examiner would like to direct applicants' to Col. 1, lines 43-50 of Kim's prior art.. Kim specifically states in Col. 1, lines 43-50, "the controller abruptly reduces power of the light emitter assembly when the battery is near exhaustion , abruptly reducing light output of the light emitter assembly, for signaling that the battery is near exhaustion and for facilitating battery replacement". Thus, without comparing the potential of the battery, the controller cannot determine the near exhaustion of the battery. Therefore, the rejection of applicants' claimed invention with Kim's reference as discussed above is proper.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ephrem Alemu whose telephone number is (571) 272-1818. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K. Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EA
12-27-05



**TUYET VO
PRIMARY EXAMINER**